

# MDA-MB-468 Whole Cell Lysate

**Cat#: orb348690 (MSDS)**

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Cell Lysate in 1X SDS-PAGE Sample Buffer with protease and phosphatase inhibitors

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** For research use only.

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

**GHS-US classification**

Not classified

### 2.2. Label Elements

**GHS-US Labeling**

No labeling applicable

### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	86.98 - 86.995	Not classified
Glycerin	(CAS No) 56-81-5	10	Not classified
Sodium lauryl sulfate	(CAS No) 151-21-3	2	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	(CAS No) 1185-53-1	1	Not classified
Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromo-	(CAS No) 115-39-9	0.005	Not classified
Sodium fluoride	(CAS No) 7681-49-4	< 0.002	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 3, H402
Trisodium orthovanadate	(CAS No) 13721-39-6	< 0.002	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Diphosphoric acid, tetrasodium salt, decahydrate	(CAS No) 13472-36-1	< 0.002	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
1,2,3-Propanetriol, 2-(dihydrogen phosphate), disodium salt, hydrate	(CAS No) 154804-51-0	< 0.002	Not classified
Trypsin inhibitor, pancreatic basic	(CAS No) 9087-70-1	<= 0.0005	Not classified
Benzenesulfonyl fluoride, 4-(2-aminoethyl)-, hydrochloride	(CAS No) 30827-99-7	<= 0.0002	Skin Corr. 1B, H314 Eye Dam. 1, H318
(2S)-2-[[[(2S,3R)-3-amino-2-hydroxy-4-phenylbutanoyl]amino]-4-methylpentanoic acid;hydrochloride	(CAS No) 65391-42-6	<= 0.0002	Not classified
L-Leucinamide, N-acetyl-L-leucyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-formylbutyl]-, sulfate (2:1)	(CAS No) 103476-89-7	<= 0.0001	Not classified
Pepstatin	(CAS No) 26305-03-3	<= 0.00007	Not classified
2-Oxiranecarboxylic acid, 3-[[[(1S)-1-[[[4-[(aminoiminomethyl)amino]butyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]-, (2S,3S)-	(CAS No) 66701-25-5	<= 0.00005	Not classified
Full text of H-phrases: see section 16			

## SECTION 4: FIRST AID MEASURES

**4.1. Description of First Aid Measures First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**Cell Lysate in 1X SDS-PAGE Sample Buffer with protease and phosphatase inhibitors** Safety Data Sheet According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 03/29/2018 Date of issue: 06/06/2017 Version: 1.0

P.O. Box 5199 Limerick, PA 19468 Tel: 484-791-3823 Fax: 484-369-8654 www.rockland-inc.com

### Methods for Cleaning Up:

Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None known.

## 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, dry chemical, foam, carbon dioxide. Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be

done without risk. Do not breathe fumes from fires or vapors from decomposition.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### Methods for Cleaning Up:

Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Do not handle until all safety precautions have been read and understood.

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, and spray.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool and well-ventilated place.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Products:** Strong acids, strong bases, strong oxidizers.

### 7.3. Specific End Use(s)

For research use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Glycerin (56-81-5)		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (mist, total particulate) 5 mg/m <sup>3</sup> (mist, respirable fraction)
Sodium fluoride (7681-49-4)		
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup> (as F)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	250 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup> (as F)

### 8.2. Exposure Controls

**Appropriate Engineering Controls :**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment :** Not generally required. The use of personal protective equipment may be necessary as conditions warrant. Gloves. Protective clothing. Protective goggles.

**Materials for Protective Clothing :** Chemically resistant materials and fabrics.

**Hand Protection :** Wear protective gloves.

**Eye Protection :** Chemical safety goggles.

**Skin and Body Protection :** Wear suitable protective clothing.

**Respiratory Protection :** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Environmental Exposure Controls :** Avoid release to the environment.

**Other Information :** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

**Physical State :** Liquid

**Appearance :** No data available

**Odor :** No data available

**Odor Threshold :** No data available

**pH :** No data available

**Evaporation Rate :** No data available



**Melting Point** : No data available  
**Freezing Point** : No data available  
**Boiling Point** : No data available  
**Flash Point** : No data available  
**Auto-ignition Temperature** : No data available  
**Decomposition Temperature** : No data available  
**Flammability (solid, gas)** : No data available  
**Vapor Pressure** : No data available  
**Relative Vapor Density at 20 °C** : No data available  
**Relative Density** : No data available  
**Solubility** : No data available  
**Partition Coefficient: N-Octanol/Water** : No data available  
**Viscosity** : No data available

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.  
**10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).  
**10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.  
**10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.  
**10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Water reactive materials.  
**10.6. Hazardous Decomposition Products:** Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Phosphoric acid. Sulfur oxides. Metal oxides. Glycerin decomposes to produce corrosive fumes of Acrolein.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Not classified

<b>Sodium lauryl sulfate (151-21-3)</b>	
LD50 Oral Rat	1288 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 3900 mg/m <sup>3</sup> (Exposure time: 1 h)
ATE (Dust/Mist)	1.50 mg/l/4h
<b>Glycerin (56-81-5)</b>	
LD50 Oral Rat	23000 mg/kg
LD50 Dermal Rabbit	> 10 g/kg
LC50 Inhalation Rat	> 570 mg/m <sup>3</sup> (Exposure time: 1 h)
<b>Pepstatin (26305-03-3)</b>	
LD50 Oral Rat	> 2 g/kg
<b>Sodium fluoride (7681-49-4)</b>	
LD50 Oral Rat	148.5 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
<b>Trisodium orthovanadate (13721-39-6)</b>	

LD50 Oral Rat	330 mg/kg
ATE (Dermal)	1,100.00 mg/kg body weight
ATE (Dust/Mist)	1.50 mg/l/4h

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not

classified. **Respiratory or Skin**

**Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

<b>Sodium fluoride (7681-49-4)</b>	
<b>IARC group</b>	<b>3</b>

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None known.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** : Not classified.

**Ecology -**

**General**

<b>Sodium lauryl sulfate (151-21-3)</b>	
<b>LC50 Fish 1</b>	8 (8 - 12.5) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
<b>EC50 Daphnia 1</b>	1.8 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC 50 Fish 2</b>	15 (15 - 18.9) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
<b>Glycerin (56-81-5)</b>	
<b>LC50 Fish 1</b>	54000 (51000 - 57000) mg/l (Exposure time: 96 h)

	- Species: Oncorhynchus mykiss [static])
<b>Sodium fluoride (7681-49-4)</b>	
<b>LC50 Fish 1</b>	> 530 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
<b>EC50 Daphnia 1</b>	338 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC 50 Fish 2</b>	830 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [semi-static])

### 12.2. Persistence and Degradability

**1X SDS-PAGE Sample Buffer; Cell Lysate in 1X SDS-PAGE Sample Buffer with protease and phosphatase inhibitors**

**Persistence and Degradability** Not established.

### 12.3. Bioaccumulative Potential

**1X SDS-PAGE Sample Buffer; Cell Lysate in 1X SDS-PAGE Sample Buffer with protease and phosphatase inhibitors**

**Bioaccumulative Potential** Not established.

**Sodium lauryl sulfate (151-21-3)**

**BCF fish 1** (will not bioconcentrate)

**Log Pow** 1.6

**Glycerin (56-81-5)**

**BCF fish 1** (no bioaccumulation)

**Log Pow** -1.76

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way.

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport



## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

#### **1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride (1185-53-1)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **Sodium lauryl sulfate (151-21-3)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **Glycerin (56-81-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**EPA TSCA Regulatory Flag Y2 - Y2** - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule

#### **Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromo- (115-39-9)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **Water (7732-18-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **Sodium fluoride (7681-49-4)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **Trisodium orthovanadate (13721-39-6)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2 US State Regulations

#### **Glycerin (56-81-5)**

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

#### **Sodium fluoride (7681-49-4)**

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST

<b>GHS Full Text Phrases:</b> Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard

	Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Sol. 2	Flammable solids Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H228	Flammable solid
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects